

Claims:

1. A network device, comprising:
 - a plurality of mid-planes; and
 - a switch fabric subsystem coupled to each of the plurality of mid-planes.
2. The network device of claim 1, further comprising:
 - a control processor card coupled to each of the plurality of mid-planes.
3. The network device of claim 2, wherein the control processor card is an internal control processor card.
4. The network device of claim 1, wherein the switch fabric subsystem comprises one or more printed circuit boards, each of which is coupled to each of the plurality of mid-planes.
5. The network device of claim 1, wherein the plurality of mid-planes comprises a first mid-plane and a second mid-plane.
6. The network device of claim 5, wherein each of the first and second mid-planes comprises a printed circuit board and a plurality of connectors.
7. The network device of claim 5, further comprising:
 - a first plurality of forwarding subsystems connected to the first mid-plane and coupled to the switch fabric subsystem through the first mid-plane.
8. The network device of claim 7, further comprising:
 - a second plurality of forwarding subsystems connected to the second mid-plane and coupled to the switch fabric subsystem through the second mid-plane.
9. The network device of claim 5, further comprising:
 - a first cross-connection subsystem connected to the first mid-plane;

a first plurality of port subsystems connected to the first mid-plane and coupled to the first cross-connection subsystem through the first mid-plane; and

a first plurality of forwarding subsystems connected to the first mid-plane and coupled to the first cross-connection subsystem and the switch fabric subsystem through the first mid-plane.

10. The network device of claim 9, further comprising:

a second cross-connection subsystem connected to the first mid-plane;

a second plurality of port subsystems connected to the first mid-plane and coupled to the second cross-connection subsystem through the first mid-plane; and

a second plurality of forwarding subsystems connected to the first mid-plane and coupled to the second cross-connection subsystem and the switch fabric subsystem through the first mid-plane.

11. The network device of claim 9, further comprising:

a second cross-connection subsystem connected to the second mid-plane;

a second plurality of port subsystems connected to the second mid-plane and coupled to the second cross-connection subsystem through the second mid-plane; and

a second plurality of forwarding subsystems connected to the second mid-plane and coupled to the second cross-connection subsystem and the switch fabric subsystem through the second mid-plane.

12. The network device of claim 10, further comprising:

a third cross-connection subsystem connected to the second mid-plane;

a third plurality of port subsystems connected to the second mid-plane and coupled to the third cross-connection subsystem through the second mid-plane; and

a third plurality of forwarding subsystems connected to the second mid-plane and coupled to the third cross-connection subsystem and the switch fabric subsystem through the second mid-plane.

13. The network device of claim 12, further comprising:

a fourth cross-connection subsystem connected to the second mid-plane;
a fourth plurality of port subsystems connected to the second mid-plane and coupled to the fourth cross-connection subsystem through the second mid-plane; and
a fourth plurality of forwarding subsystems connected to the second mid-plane and coupled to the fourth cross-connection subsystem and the switch fabric subsystem through the second mid-plane.

14. The network device of claim 10, wherein the first and second cross-connection subsystems are coupled together through the first mid-plane.

15. The network device of claim 13, wherein the third and fourth cross-connection subsystems are coupled together through the second mid-plane.

16. The network device of claim 13, wherein the first, second, third and fourth cross-connection subsystems are coupled together through the first and second mid-planes and the switch fabric subsystem.

17. A network device, comprising:

a first mid-plane;
a second mid-plane;
a switch fabric card coupled to the first mid-plane and the second mid-plane;
a first cross-connection card connected to the first mid-plane;
a first port card connected to the first mid-plane and coupled to the first cross-connection card through the first mid-plane; and
a first forwarding card connected to the first mid-plane and coupled to the first cross-connection subsystem and the switch fabric subsystem through the first mid-plane.

18. The network device of claim 17, further comprising:

a second cross-connection card connected to the second mid-plane;
a second port card connected to the second mid-plane and coupled to the second cross-connection card through the second mid-plane; and

a second forwarding card connected to the second mid-plane and coupled to the second cross-connection subsystem and the switch fabric subsystem through the second mid-plane.

19. The network device of claim 18, further comprising:

a third cross-connection card connected to the first mid-plane;

a third port card connected to the first mid-plane and coupled to the third cross-connection card through the first mid-plane; and

a third forwarding card connected to the first mid-plane and coupled to the third cross-connection subsystem and the switch fabric subsystem through the first mid-plane.

20. The network device of claim 19, further comprising:

a fourth cross-connection card connected to the second mid-plane;

a fourth port card connected to the second mid-plane and coupled to the fourth cross-connection card through the second mid-plane; and

a fourth forwarding card connected to the second mid-plane and coupled to the fourth cross-connection subsystem and the switch fabric subsystem through the second mid-plane.